

RAW SEQUENCE LISTING

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Application Serial Number: 10/569,010
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DATE: 05/31/2006

PATENT APPLICATION: US/10/596,010

TIME: 10:44:24

Input Set : A:\Sequence Listing.ST25.txt

Output Set: N:\CRF4\05312006\J596010.raw

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3 <110> APPLICANT: University of Copenhagen
4   Andreasson, Erik
5   Brodersen, Peter
6   Jenkins, Tom
7   Mundy, John
8   Petersen, Nikolaj
9   Thorgrimsen, Stefan
10  Rocher, Anne
12 <120> TITLE OF INVENTION: PLANT DISEASE RESISTANCE AND SAR REGULATOR PROTEIN
14 <130> FILE REFERENCE: 09663.0068USWO
16 <140> CURRENT APPLICATION NUMBER: 10/596,010
17 <141> CURRENT FILING DATE: 2006-05-25
19 <150> PRIOR APPLICATION NUMBER: PCT/DK2004/000822
20 <151> PRIOR FILING DATE: 2004-11-26
22 <150> PRIOR APPLICATION NUMBER: DK PA200301759
23 <151> PRIOR FILING DATE: 2003-11-28
25 <150> PRIOR APPLICATION NUMBER: US 60/526,319
26 <151> PRIOR FILING DATE: 2003-12-01
28 <160> NUMBER OF SEQ ID NOS: 28
30 <170> SOFTWARE: PatentIn version 3.3
32 <210> SEQ ID NO: 1
33 <211> LENGTH: 669
34 <212> TYPE: DNA
35 <213> ORGANISM: Arabidopsis sp.
37 <400> SEQUENCE: 1
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40 cagcttcaga tctgtgggtcc tcgtccttca cctcttagtg ttcacaaaga ctctcacaaa      120
42 atcaagaaac ctccaaaaca ccctgcgcgcg ccgccaatc gtgaccaacc gccgccgtat      180
44 attcctagag agccggtggt tatctacgcc gtatccccca aggttgtaga cgcaaccgcg      240
46 tctgagttca tgaacgtagt ccagcgactc acagggatct cctctggtgt tttcctcgaa      300
48 tctggcgccg gtggagatgt ttcaccggcg gcgaggctag cgtccacgga aaatgctagt      360
50 ccaagaggag gaaaagaacc ggctgcgaga gatgagacgg tggaaatcaa cacggctatg      420
52 gaagaagcag ctgaatttgg tggttatgct ccggaatac tctcgccatc tccggccttg      480
54 ttgccaacag cttctaccgg gatattctct ccgatgtatc atcaaggtgg gatgttttcg      540
56 ccggctatac cactgggatt attctcgccg gcgggattta tgagcccgtt tcgaagtcct      600
58 ggctttacta gtttggtagc ttcaccaact tttgctgatt tctttagtag tatttgggat      660
60 caagattag
63 <210> SEQ ID NO: 2
64 <211> LENGTH: 222
65 <212> TYPE: PRT
66 <213> ORGANISM: Arabidopsis sp.
68 <400> SEQUENCE: 2
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71 1          5          10          15
74 Asn Gln Lys Arg Gln Leu Gln Ile Cys Gly Pro Arg Pro Ser Pro Leu
75          20          25          30
78 Ser Val His Lys Asp Ser His Lys Ile Lys Lys Pro Pro Lys His Pro
79          35          40          45
82 Ala Pro Pro Pro Asn Arg Asp Gln Pro Pro Pro Tyr Ile Pro Arg Glu
83 50          55          60
86 Pro Val Val Ile Tyr Ala Val Ser Pro Lys Val Val His Ala Thr Ala
87 65          70          75          80
90 Ser Glu Phe Met Asn Val Val Gln Arg Leu Thr Gly Ile Ser Ser Gly
91          85          90          95
94 Val Phe Leu Glu Ser Gly Gly Gly Gly Asp Val Ser Pro Ala Ala Arg
95          100          105          110
98 Leu Ala Ser Thr Glu Asn Ala Ser Pro Arg Gly Gly Lys Glu Pro Ala
99          115          120          125
102 Ala Arg Asp Glu Thr Val Glu Ile Asn Thr Ala Met Glu Glu Ala Ala
103          130          135          140
106 Glu Phe Gly Gly Tyr Ala Pro Gly Ile Leu Ser Pro Ser Pro Ala Leu
107 145          150          155          160
110 Leu Pro Thr Ala Ser Thr Gly Ile Phe Ser Pro Met Tyr His Gln Gly
111          165          170          175
114 Gly Met Phe Ser Pro Ala Ile Pro Leu Gly Leu Phe Ser Pro Ala Gly
115          180          185          190
118 Phe Met Ser Pro Phe Arg Ser Pro Gly Phe Thr Ser Leu Val Ala Ser
119          195          200          205
122 Pro Thr Phe Ala Asp Phe Phe Ser His Ile Trp Asp Gln Asp
123          210          215          220
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127 <211> LENGTH: 16
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129 <213> ORGANISM: Arabidopsis sp.
131 <400> SEQUENCE: 3
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133                                     16
135 <210> SEQ ID NO: 4
136 <211> LENGTH: 16
137 <212> TYPE: DNA
138 <213> ORGANISM: Arabidopsis sp.
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142                                     16
144 <210> SEQ ID NO: 5
145 <211> LENGTH: 720
146 <212> TYPE: DNA
147 <213> ORGANISM: Arabidopsis sp.
149 <400> SEQUENCE: 5
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151                                     60
152 gtccgtggag attcgcaaa gatcatcaag aagccaccac tagcgccgcc acaccgcaa
153                                     120
154 ccacaaccac cacaaccca tcagcaagaa ccgtcacaat cgcgccgcc acctgggtccc
155                                     180
156 gtgattatat acacagtatc tcccaggatt atccatacac accctaataa ctctcatgaca
157                                     240
158 ttggtccaac gtctcacagg taaaacctcc acctccacaa catcctcctc ctattcttca
159                                     300

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160 tctacgtcag caccaaaaga cgcgtcaaca atgggttgata catctcatgg gttgatattct 360
162 cggcgcggtc gggttgctgt tacagagaag gctaatatct caaacgaact agggacattt 420
164 gttggaggcg aagggaactat ggatcaatat tatcattatc atcatcatca tcatcatcaa 480
166 gaacaacaac atcaaaatca agggttcgag cggccaagtt tccaccatgc tgggatttta 540
168 tcgccgggac ctaattctct gccgtcggta tcaccggact tcttttccac tattggacca 600
170 accgatccac aagggtttttc gtcgttcttt aatgacttta actctatcct tcagagtagt 660
172 ccacgaaga ttcagtctcg ttcgtctatg gaccttttca acaatttctt tgattcttga 720

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175 <210> SEQ ID NO: 6

176 <211> LENGTH: 239

177 <212> TYPE: PRT

178 <213> ORGANISM: Arabidopsis sp.

180 <400> SEQUENCE: 6

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182 Met Asp Asn Arg Ser Pro Arg Ser Arg Gly Ile Leu Gly Pro Arg Pro
183 1 5 10 15
186 Ile Pro Leu Lys Val Arg Gly Asp Ser His Lys Ile Ile Lys Lys Pro
187 20 25 30
190 Pro Leu Ala Pro Pro His Pro Gln Pro Gln Pro Pro Gln Thr His Gln
191 35 40 45
194 Gln Glu Pro Ser Gln Ser Arg Pro Pro Pro Gly Pro Val Ile Ile Tyr
195 50 55 60
198 Thr Val Ser Pro Arg Ile Ile His Thr His Pro Asn Asn Phe Met Thr
199 65 70 75 80
202 Leu Val Gln Arg Leu Thr Gly Lys Thr Ser Thr Ser Thr Thr Ser Ser
203 85 90 95
206 Ser Tyr Ser Ser Ser Thr Ser Ala Pro Lys Asp Ala Ser Thr Met Val
207 100 105 110
210 Asp Thr Ser His Gly Leu Ile Ser Pro Ala Ala Arg Phe Ala Val Thr
211 115 120 125
214 Glu Lys Ala Asn Ile Ser Asn Glu Leu Gly Thr Phe Val Gly Gly Glu
215 130 135 140
218 Gly Thr Met Asp Gln Tyr Tyr His Tyr His His His His His Gln
219 145 150 155 160
222 Glu Gln Gln His Gln Asn Gln Gly Phe Glu Arg Pro Ser Phe His His
223 165 170 175
226 Ala Gly Ile Leu Ser Pro Gly Pro Asn Ser Leu Pro Ser Val Ser Pro
227 180 185 190
230 Asp Phe Phe Ser Thr Ile Gly Pro Thr Asp Pro Gln Gly Phe Ser Ser
231 195 200 205
234 Phe Phe Asn Asp Phe Asn Ser Ile Leu Gln Ser Ser Pro Ser Lys Ile
235 210 215 220
238 Gln Ser Pro Ser Ser Met Asp Leu Phe Asn Asn Phe Phe Asp Ser
239 225 230 235

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242 <210> SEQ ID NO: 7

243 <211> LENGTH: 20

244 <212> TYPE: DNA

245 <213> ORGANISM: Arabidopsis sp.

247 <400> SEQUENCE: 7

248 atggataata gatcgccaag

251 <210> SEQ ID NO: 8

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252 <211> LENGTH: 21
253 <212> TYPE: DNA
254 <213> ORGANISM: Arabidopsis sp.
256 <400> SEQUENCE: 8
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260 <210> SEQ ID NO: 9
261 <211> LENGTH: 791
262 <212> TYPE: DNA
263 <213> ORGANISM: Brassica oleracea
265 <400> SEQUENCE: 9
266 taattttttcc cttttttttt tgtttataaa tgttttggtc aatactagct cgtcgctcgac      60
268 aaagattcat ttcgattccc aaaccacaca agaagaacac aaattagctc gaaagaaaca      120
270 aactcttttg agaaaataat ggatccgctg gagtctttcg ccggcggaac tccttccgac      180
272 caacagaacc agaaacgtca gcttcagatc tgtggtcctc gtccctcacc tctcagcgtc      240
274 aacaaagact ctcacaagat caagaaacct cctaaacacc ctgctcctcc gctcagcat      300
276 cgcgaccaag ctccgctcta cgctgctcga gagccggtgg tcatctacgc cgtctcgccg      360
278 aaagtcgtcc acaccacagc ctcggtttc atgaacgtcg tccagcgtct caccggcatc      420
280 tcatccgccc tcttctctga atccggtaac ggcggagatg tatctccggc ggcgagactc      480
282 gccgagacag agaattgaaag ccgagagagga ggaaaagaac agttgatggc ggctaaagat      540
284 gagacgggtg aaatcgcgac ggctatggaa gaagcagccg agttgagcgg ctatgcgccc      600
286 gggatactct ccccttctcc ggctatgtta ccgacagctt ctgccggaat attctcgcag      660
288 atgactactc accaaggtgg gatgttctcg ccgggattgt tttcgccggc ggggttaatg      720
290 agcccgtttg gttttgctag cttggttgct tctccaacgt ttgctgattt gttcagtcac      780
292 atttggggat a                                              791
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296 <211> LENGTH: 217
297 <212> TYPE: PRT
298 <213> ORGANISM: Brassica oleracea
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306 Asn Gln Lys Arg Gln Leu Gln Ile Cys Gly Pro Arg Pro Ser Pro Leu
307          20          25          30
310 Ser Val Asn Lys Asp Ser His Lys Ile Lys Lys Pro Pro Lys His Pro
311          35          40          45
314 Ala Pro Pro Pro Gln His Arg Asp Gln Ala Pro Leu Tyr Ala Ala Arg
315          50          55          60
318 Glu Pro Val Val Ile Tyr Ala Val Ser Pro Lys Val Val His Thr Thr
319 65          70          75          80
322 Ala Ser Asp Phe Met Asn Val Val Gln Arg Leu Thr Gly Ile Ser Ser
323          85          90          95
326 Ala Val Phe Leu Glu Ser Gly Asn Gly Gly Asp Val Ser Pro Ala Ala
327          100         105         110
330 Arg Leu Ala Ala Thr Glu Asn Ala Ser Pro Arg Gly Gly Lys Glu Pro
331          115         120         125
334 Val Met Ala Ala Lys Asp Glu Thr Val Glu Ile Ala Thr Ala Met Glu
335          130         135         140
338 Glu Ala Ala Glu Leu Ser Gly Tyr Ala Pro Gly Ile Leu Ser Pro Ser
339 145         150         155         160

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342 Pro Ala Met Leu Pro Thr Ala Ser Ala Gly Ile Phe Ser Gln Met Thr
343           165           170           175
346 Thr His Gln Gly Gly Met Phe Ser Pro Gly Leu Phe Ser Pro Ala Gly
347           180           185           190
350 Leu Met Ser Pro Phe Gly Phe Ala Ser Leu Val Ala Ser Pro Thr Phe
351           195           200           205
354 Ala Asp Leu Phe Ser His Ile Trp Gly
355           210           215
358 <210> SEQ ID NO: 11
359 <211> LENGTH: 20
360 <212> TYPE: DNA
361 <213> ORGANISM: Brassica oleracea
363 <400> SEQUENCE: 11
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367 <210> SEQ ID NO: 12
368 <211> LENGTH: 20
369 <212> TYPE: DNA
370 <213> ORGANISM: Brassica oleracea
372 <400> SEQUENCE: 12
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376 <210> SEQ ID NO: 13
377 <211> LENGTH: 878
378 <212> TYPE: DNA
379 <213> ORGANISM: Brassica oleracea
381 <400> SEQUENCE: 13
382 aaaagtcaac attttgaaaag tcaaactaat cgggtctcaga aaacaaaaaat aactttgtgt      60
384 gttgatgttt aggtcaatat actcgtcgtc aaaacatccc ttcaatttct cagaccaaac      120
386 acagagaaga aacaagttgg atccaaactc tctacaacaa aaagtagtga acgagagaag      180
388 ctctccccc aa gcgtttaatg gatccgtcgg agcacttcgc cggcggtaat cctttcgcgc      240
390 aacagactcc aaaacgtcag cttcagatct gtggccctcg tccttcacct ctaagcgtca      300
392 acaaagactc tcacaagatc aagaaacctc ccaggcacc tgctccacct cctcagcatc      360
394 accgcgacca agctccgctc taccctcctc gagagccggt gggtatctac gccgtctcgc      420
396 cgaagtcgt gcacaccaca acctccgatt tcatgaacgt cgtccagcgt ctcaccggga      480
398 tctcctccga ggtcttcctc gaatcaagaa acgacggaga tgtatcaccg gcggcgagac      540
400 tcgccgcgac ggagaatgct agcccgagag gaggaagga accggtggaa agctcgacgg      600
402 ctatggaaga agcagctgag ttcggttggt atgtgccggg aatactctcg ccgtctccgg      660
404 ctatgttacc gaccgttccc gccggaatth tctctccgat gtttcaccta ggtgggttgt      720
406 tttcgccggc gttgccggcg ggattattht cgccggcagg attaatgagc cctgggttatg      780
408 ctagtttggc gtcaccaaah tttgctgatt tcttcagtca catttgggat ccttagagaa      840
410 tagattatta gtttttttta ttatttacat tttatgta                                     878
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414 <211> LENGTH: 212
415 <212> TYPE: PRT
416 <213> ORGANISM: Brassica oleracea
418 <400> SEQUENCE: 14
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425           20           25           30

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VERIFICATION SUMMARY

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